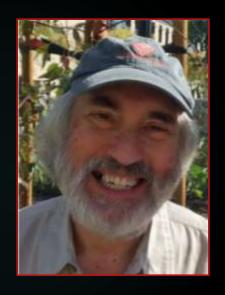
January 21, 2020

Perspectives of Stanford Students with a Disability

ENGR110/210 Perspectives in Assistive Technology



David L. Jaffe, MS
Instructor

14 Years

Questions?







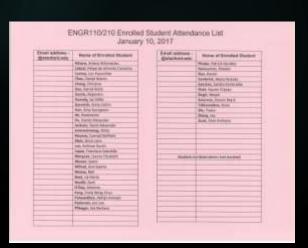
Attendance Sheet, Evaluation Form, and Meet with Dave Signup

For all students:

- Sign Attendance Sheet important to verify your attendance
- Sign up to meet with Dave for lecture makeup and Project approval & progress

For everyone:

Fill out Class Session Evaluation Form



			Assistive sion Eval			017	Use a pen wit a legible font
Lecture 01s:	Course Overview & I	ntraduction to	Assistive Test	resology - D	estil L. Jeffe, I	MB.	
Are yes	u un enrolled student?	☐ - Yes	II - No				
The purpose of	this questionnaire is to	help the teach	reg boom assesse	r today's class	n sension. Pau	ann rate bro	e following lanuars
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Sign Up to N	feet with Dave
After class in	tside Thornton 110 n Thornton 110 son Building, Room 113
Date & Time	Enter Searn Rame: & Specify 13 crimate Sess Man
Wednesday - January 18 th	
Mining - Bildan - III Man	
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Thursday - January 19 th	
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Afternoon – 1,444 – J. Hopes	
Bafore state - 3: Open - publish statishans	
After class - form	7
Friday-January 25 th	
Morning - It 3Gers - 13 Cliens	









Team Projects

- Attend PRL safety session & purchase Shop pass
- Report team project progress
- Connect with your project suggestor
- Understand the problem
- Meet with Dave



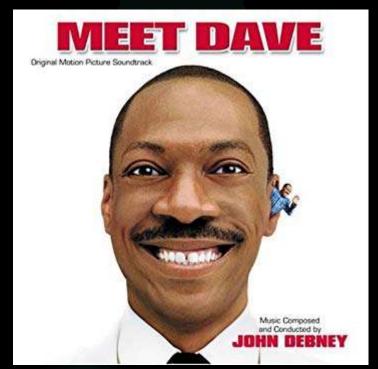
Benefits of meeting with Dave



Make up missed lectures

 Gain valuable perspectives on your Team or 1 & 2 credit unit Project

- Optimize your course and project experience
 - Receive best grade
 - Minimize fabrication time
 - Maximize prototype functionality
- Get a chocolate chip cookie



Classic Rock

- ► AC / DC
- ▶ Beatles (4)
- ▶ Bob Dylan
- ► Eagles (2)
- ► ELO
- Grateful Dead
- Hawkwind
- Kings of Leon
- Led Zeppelin

- Los Bravos
- Lynrd Skynyrd
- Muse
- Pink Floyd
- ▶ Queen (4)
- ► Red Hot Chili Peppers
- ▶ RHCP
- ► Rolling Stones
- Velvet Underground

How we judge others

- race
- religion
- gender
- gender identity
- skin color
- appearance glasses, hair style
- clothing & shoes
- anatomy height, weight, nose, eye color
- university attended
- year in school
- major
- political affiliation
- sport team fan

- disability
- age
- speech / accent
- medical status
- immigration status
- employment status
- fame / notoriety
- criminal record
- driving record
- place of residence
- athleticism
- record of achievement, intelligence
- material possessions car, house, phone

The course instructor judges your project effort including presentations and reports

Dr Martin Luther King Jr.





How might the teachings of Dr Martin Luther King Jr. relate to people with disabilities and older adults?

"I have a dream that my four little children will one day live in a nation where they will not be judged by the color of their skin but by the content of their character."





Dr Martin Luther King Jr.







How might the teachings of Dr Martin Luther King Jr. relate to people with disabilities and older adults?

"I have a dream that my four little children will one day live in a nation where they will not be judged by the color of their skin but by the content of their character."

Disability and advanced age do not represent weaknesses of character.





Product Pricing





Product pricing includes much more than cost of materials

Product Pricing



- One Time Costs Manufacturing equipment and equipment leases, furniture, fixtures, computers, phones, etc
- Recurring Costs Property and office rent, salaries (labor) / wages/ commissions, utilities (electricity, internet, water, garbage, etc)
- Product-related Costs Product research, prototyping, testing, accounting, shipping, parts, profit, advertising (printing), packaging, vehicles
- Business-related Costs Loan repayments, inventory, financing costs, damaged merchandise, operating and legal expenses, overhead, theft, insurance, membership dues, market research, advertising and promotion, office supplies and equipment, travel, recruiting
- Production-related Costs Economies of scale, automation, mass production techniques
- Scale-related Costs Retail price falls with number of units manufactured & sold

Student Projects from 2019



STUDENT PROJECT GALLERY

Secure Shopping Project for Abby





Explore ways to provide Abby, a power wheelchair user, a way to hold items she wishes to purchase while grocery shopping.



Pain-free Buckles for Abby's Service Dog









Explore solutions that will make it easier and less painful for Abby to operate buckles on her service dog's harness.

Elevator Button Pusher for Angie







Explore device designs that would enable Angie to ride elevators independently



Lap Tray for Danny







Explore designs that would provide Danny with a lap tray that he can easily deploy and stow given his reduced arm range of motion and limited hand dexterity.

Water Bottle & iPhone Holder for Danny







Explore designs that would provide Danny with a device that would hold his water bottle and iPhone while using his manual wheelchair.

Pick Up Stick for Danny





Explore designs that would provide Danny with a device that would facilitate picking up dropped items from the floor.



Magical Bridge Playground Project





Explore designs to create new play and educational experiences along the playground fence that incorporate multiple senses, actions, and outcomes for all playground users and visitors, especially those with visual impairments and diminished fine motor skills.

Hide-Away Lap Tray for Nick









Explore designs for a stowable device for Nick that would prevent items from falling from his lap when operating his manual wheelchair.

Lap Extender for Tony









Explore designs for a wheelchair accessory that will not interfere with propulsion while Tony is carrying or using items such as a food tray or laptop computer.

Thursday, January 23rd





Designing Beyond the Norm to Meet the Needs of All People

Peter W. Axelson, MSME, ATP, RET

Beneficial Designs, Inc.

Director of Research & Development

Today











Perspectives of Stanford Students with a Disability

Benjamin S. Woodford, Sylvia Colt-Lacayo, Gene Sung-Ho Kim, and Austin Gregory Brotman

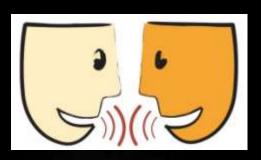
Short Break







Break Activities







- Stand up and stretch
- ▶ Take a bio-break
- ▶ Text message
- Web-surf
- Respond to email
- ▶ Talk with classmates
- Reflect on what was presented in class







